



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/912,437	07/26/2001	Yuji Taguchi	358362010500	4857

25227            7590            06/19/2003  
**MORRISON & FOERSTER LLP**  
1650 TYSONS BOULEVARD  
SUITE 300  
MCLEAN, VA 22102

EXAMINER
----------

HAMILTON, CYNTHIA

ART UNIT	PAPER NUMBER
----------	--------------

1752

DATE MAILED: 06/19/2003

5

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/912,437	TAGUCHI ET AL.	<i>g</i>
	<b>Examiner</b>	<b>Art Unit</b>	
	Cynthia Hamilton	1752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 07 November 2001.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-5,7-15 and 17-20 is/are rejected.
- 7) Claim(s) 6 and 16 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

Art Unit: 1752

**DETAILED ACTION**

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 2 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite

for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 2 and 12 are limited to "Shore hardness of not less than 50°".

The examiner notes for the record that this is an incorrect citation of Shore hardness. Applicants on page 7 reference a Shore D hardness of not less than 35° for their substrates. Citing CALCE as a standard reference showing what would be understood by one skilled in the related arts, the examiner references 3.5 Shore, to point out that citation of A or D with Shore hardness is essential for completeness and that the reading of Shore Hardness is dimensionless. Thus,

---

applicant's limits in claims 2 and 12 are confusing. The higher the number the harder the substance being tested is. 100 is a reading of complete penetration and 0 is a reading of no penetration of the diamond-tipped hammer of the Durometer. The examiner also notes that time may be an important factor with this measurement and that indentation time is sometimes reported alone with the hardness number. The examiner points to the Figure 7 of CALCE to show the differences in Shore A and Shore D hardness numbers. Because of the imprecise wording of claims 2 and 12, the claims are held vague and confusing.

4. The disclosure is objected to because of the following informalities:

All reference to Shore Hardness measurements in the specification starting with page 3 need to be reported without dimension, i.e. 50° should be just 50. The examiner found such measurement numbers on pages 3, 6, 7 and 20. Citing CALCE as a standard reference showing what would be understood by one skilled in the related arts, the examiner references 3.5 Shore, to point out that the reading of Shore Hardness is dimensionless.

Appropriate correction is required.

5. Claims 2 and 12 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. The identification of the kind of Shore hardness measured for the photosensitive resin layer is critical or essential to the practice of the invention, i.e. "the photosensitive resin layer has...a Shore hardness of not less than 50°", but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). Applicants never address what kind of Shore Hardness scale is being used to measure the photosensitive resin layer. Citing CALCE as a standard reference showing what would be understood by one skilled in the related arts, the examiner references 3.5 Shore, to point out that citation of A or D with Shore hardness is essential for completeness. The examiner points to the Figure 7 of CALCE to show the differences in Shore A and Shore D hardness numbers. The A scale and the D scale overlap. Thus, without identification of this factor workers of ordinary skill in the art are not enabled to produce the invention set forth in claims 2 and 12 because they are missing a critical feature of the required limit. Also, the examiner notes that applicants give no working example where such a measurement is made in the specification. The worker of ordinary skill in the art does not know what was tested for the Shore hardness number. Was it the photosensitive resin layer combined with the support and the adhesive layer?

Art Unit: 1752

Was it the photosensitive layer without support? Is applicant's reference here really to the hardness of the cured material no longer photosensitive because it has been polymerized by irradiation already? The examiner believes with respect to this measurement that the originally filed specification fails to give enabling disclosure for workers of ordinary skill in the art to practice their invention. The examiner does note that applicants do give enabling disclosure for hardness measurements of the support in their disclosure as evidenced on page 7.

6. **The examiner notes for the record** that all signboards, plates and laminates claimed by applicants require the presence of a photosensitive resin layer. Applicants in the paragraph bridging pages 4-5 address this layer. It is exemplified by a composition which is photopolymerizable or photocrosslinkable. When this layer is irradiated it forms a cured material that is no longer photopolymerizable or photocrosslinkable but instead is photopolymerized or photocrosslinked. The layer is no longer the same as before irradiation. It is not "photosensitive" in the sense of being hardenable by irradiation in the electromagnetic spectrum. Applicants have in all their claims required the presence of the photosensitive resin layer. While in claims 8 and 18, they make reference to a signboard having a relief; the photosensitive resin laminate and thus photosensitive layer is required present. This signboard claimed is not the same as the signboard prepared on page 13. The unclaimed signboard on page 13 is prepared from the photosensitive laminate by insolubilizing the photosensitive resin layer by an actinic ray which changes the irradiated portions to another material, e.g. polymerized or crosslinked, the imaged layer is developed by dissolution, leaving a clear image relief. The relief is not the photosensitive laminate required present in all of instant claims 1-20. However, in viewing the application as a whole the examiner notes applicants claim language does not match

Art Unit: 1752

the specification with regards to the actual working examples of their invention. Absorbance at 400-600 nm is measured for the product of insolubilizing the photosensitive resin layer, i.e. on the non photosensitive layer, as is scattering rate and turbidity. However, total light transmission is measured before insolubilization, i.e. on the photosensitive laminate. Applicants define the plate for a signboard on page 8, as "In the present invention, by the "plate for a signboard" is meant a photosensitive resin laminate comprising a support having a thickness of not less than 1 mm, which can form a signboard by exposure to light and developing."

7. **The examiner notes the term "cissing" used on page 9, line 19,** and finds it not to be a misspelling but to mean the same as "crawling" which is "The tendency of a liquid to draw up into drops or globules as a result of an abnormally high degree of surface tension." (The National Paint Dictionary, 2nd ed, by Jeffry R. Stewart) or "Partial creeping back and contracting of the film with formation of indented or beading boarder-lines and/or uncovered islands or even only pinholes, where the bare substratum becomes visible" (1951 edition of Paint Film Defects by Manfred Hess) or "A slight shrinkage of a glossy paint coat resulting in small cracks through the undercoat may be seen; a mild form of crawling." (1995 edition of the Paint and Coatings Encyclopediac Dictionary published by the Federation of Societies for Coatings Technology) All of these definitions are set forth in the IZZO reference cited by the examiner. No copies of the Steward, Hess or Federation references are sent with this action. The examiner relies solely on IZZO as the expert citing these references with regard to the art recognized meaning of "cissing".

8. Claims 10 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 10 and 20 require that an image be on the "back of the support"

Art Unit: 1752

but to that point what is back or front of the support has never been defined. Thus, what is meant by "back" with respect to the support is unclear. Is the back on the side opposite of the adhesive layer and/or the photosensitive resin layer?

9. The examiner notes that claims 10 and 20 also require that "the layer having the image is directly printed on the back of the support. Thus, if printing is taken to mean a discontinuous layer as in an ink image then "layer" is not limited only to continuous layers but can include discontinuous layers. The examiner notes that the laminate of claim 1 does not require that the support, adhesive layer and photosensitive resin layer be assembled in any particular order. All that is required is that they be a photosensitive resin laminate. The same is true of all the other claims wherein no order is specified.

10. The examiner notes for the record that "ultraviolet transmission at 400 nm" in claims 8 and 19 is more simply put the transmission at 400 nm. This wavelength is at the beginning of the UV range and the end of the visible range of the electromagnetic spectrum. There is no indication that applicants in their testing mean the entire UV range, e.g. 400 nm to 100 nm or smaller, is being referenced by the limit "a coating layer having an ultraviolet transmission at 400 nm of not more than 50% on its surface". DYMAX and KENTEK are cited to show the range of UV, i.e. ultraviolet radiation.

11. The examiner notes for the record that "plate for a signboard" as found in claims 7 and 17 is specifically defined on page 8, in lines 8-13, as "a photosensitive resin laminate comprising a support having a thickness of not less than 1 mm, which can form a sign board by exposure to light and developing." The sign board of claims 7 and 17 is so limited by applicant's own

Art Unit: 1752

definition. Thus, the plate of claim 7 and 17 have a limit of a substrate of at least 1mm being present even if not cited in the claim language.

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. Claims 1-5, 7-8, 11-15, 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Platzer et al (5,374,184) as optionally evidenced by Kelly et al (4,098,952) cited in penultimate line of column 4 of Platzer et al and Pears (4,391,767) cited in Example 1 in Platzer et al. The laminate of Example 1 to the point before the color layer is added anticipates the instant photosensitive resin laminate and plate for a signboard. The adhesive promoter is the instant adhesive layer and the composition of lines 55-66 in col. 8 is the uncolored polymerization layer of Platzer et al and also inherently a transparent photosensitive layer. Thus, the laminate formed to this point by Platzer et al anticipates the instant laminate and plate set forth in applicant's claims 1-5, 7-8, 11-15 and 17. In Platzer et al, see particularly col. 4, lines 32-36, col. 4, line 56- col. 5, line 55, col. 8 lines 1-21 and Examples 2-8. Kelly et al is cited by Platzer et al as an example of an adhesion -promoting primer disclosed by Platzer as that of US No. 4,391,767, i.e. Pears.

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 1752

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

15. Claims 1-5, 8-15 and 19-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Vreeland, Jr. et al (2003/0091802 A1). The laminate of claim 4 of Vreeland, Jr. et al anticipates the instant laminate of claim 1. The Example 1 laminate and photosensitive resin sign board of Vreeland, Jr. et al anticipates the instant laminate and signboard wherein the photosensitive resin laminate of Vreeland, Jr. et al inherently satisfies the formula (1) of instant claim 1 and inherently has the required Shore hardness, absorbance at 400 nm, scattering rate and turbidity.

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

16. Claims 7 and 17 are rejected under 35 U.S.C. 103(a) as being obvious over Vreeland, Jr. et al (2003/0091802 A1). The laminate of claim 4 of Vreeland, Jr. et al anticipates the instant laminate of claim 1. The Example 1 laminate and photosensitive resin sign board of Vreeland, Jr. et al anticipates the instant laminate and signboard wherein the photosensitive resin laminate of Vreeland, Jr. et al inherently satisfies the formula (1) of instant claim 1 and inherently has the required Shore hardness, absorbance at 400 nm, scattering rate and turbidity. What is not anticipated by Vreeland, Jr. et al is the defined plate for a signboard because by definition on

Art Unit: 1752

page 8 of applicant's specification, the photosensitive thickness cannot be less than 1 mm. The Example 1 photosensitive layer is 800  $\mu\text{m}$  which is 0.8 mm. However, Vreeland, Jr. et al teach in [0024] that photosensitive layers preferably from 800 to 1200  $\mu\text{m}$  are used. This is a range of 0.8 mm to 1.2 mm. With respect to instant claims 7 and 17, in the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a prima facie case of obviousness exists. In re Wertheim, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); In re Woodruff, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990). The overlap is from 1000 to 1200  $\mu\text{m}$  with respect to Vreeland, Jr. et al.

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or

Art Unit: 1752

subject to an obligation of assignment to the same person. See MPEP § 706.02(l)(1) and § 706.02(l)(2).

17. Claim 1 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 09/537,418. Although the conflicting claims are not identical, they are not patentably distinct from each other because the alternative sign plate of the copending application claim 1 wherein the an adhesive layer is present is a species of the instant laminate. There is only one choice to make in the copending claims and that is to use adhesive or not. Where adhesive is used, the sign board of the copending claims anticipates the instant laminate because the not less than 70% total light transmission in the copending claims is a range completely encompassed by the instant range of not less than 60 %. The choice of one element of the Markush group of laminates set forth by the copending claims would have made *prima facie* obvious the instant laminate in applicant's claim 1.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

18. Claims 1-5, 9-15 and 18-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Motoi et al (US 2002/0006581 A1). The photosensitive resin laminate of the examples of Motoi et al anticipates the instant laminates. The choice of laminate wherein adhesive layer present or not is held immediately envisionable as one of only two choices as set forth in claim 1 and the narrower range of less than 70 % total light transmission required by Motoi et al is held to be completely encompassed by applicants' requirement for less than 60 % total light transmission required. “[W]hen, as by a recitation of ranges or otherwise, a claim covers several

Art Unit: 1752

compositions, the claim is anticipated' if one of them is in the prior art." Titanium Metals Corp. v. Banner, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985) (citing In re Petering, 301 F.2d 676, 682, 133 USPQ 275, 280 (CCPA 1962)).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

19. Claims 7 and 17 are rejected under 35 U.S.C. 103(a) as being obvious over Motoi et al (US 2002/0006581 A1).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this

Art Unit: 1752

rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(l)(1) and § 706.02(l)(2). The photosensitive resin laminate of the examples of Motoi et al anticipates the instant laminates. What is not anticipated by Motoi et al is the defined plate for signboard because by definition on page 8 of applicant's specification, the photosensitive thickness cannot be less than 1 mm. The Example 1 photosensitive layer is 800  $\mu\text{m}$  which is 0.8 mm. However, Motoi et al in [0023] teach photosensitive resin layers having a thickness of preferably from 500  $\mu\text{m}$  to 2000  $\mu\text{m}$ , i.e. 0.5 to 2 mm, more preferably 600  $\mu\text{m}$  to 1500  $\mu\text{m}$ , i.e. 0.6 to 1.5 mm. With respect to instant claims 7 and 17, in the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a prima facie case of obviousness exists. In re Wertheim, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); In re Woodruff, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990). The overlap is from 1000 to 2000  $\mu\text{m}$  with respect o Motoi et al.

20. Claims 1-5, 9-15 and 18-20 are rejected under 35 U.S.C. 102(a) as being anticipated by Motoi et.al (EP-1-040912 A2). The photosensitive resin laminate of the examples of Motoi et al anticipates the instant laminates. The choice of laminate wherein adhesive layer present or not is held immediately envisionable as one of only two choices as set forth in claim 1 and the narrower range of less than 70 % total light transmission required by Motoi et al is held to be completely encompassed by applicants' requirement for less than 60 % total light transmission required. "[W]hen, as by a recitation of ranges or otherwise, a claim covers several compositions, the claim is anticipated" if one of them is in the prior art." Titanium Metals Corp.

Art Unit: 1752

v. Banner, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985) (citing *In re Petering*, 301 F.2d 676, 682, 133 USPQ 275, 280 (CCPA 1962)).

21. Claims 7 and 17 are rejected under 35 U.S.C. 103(a) as being obvious over Motoi et al (EP 1 040 912 A2). The photosensitive resin laminate of the examples of Motoi et al anticipates the instant laminates. What is not anticipated by Motoi et al is the defined plate for signboard because by definition on page 8 of applicant's specification, the photosensitive thickness cannot be less than 1 mm. The Example 1 photosensitive layer is 800  $\mu\text{m}$  which is 0.8 mm. However, Motoi et al in [0023] teach photosensitive resin layers having a thickness of preferably from 500  $\mu\text{m}$  to 2000  $\mu\text{m}$ , i.e. 0.5 to 2 mm, more preferably 600  $\mu\text{m}$  to 1500  $\mu\text{m}$ , i.e. 0.6 to 1.5 mm. With respect to instant claims 7 and 17, in the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a prima facie case of obviousness exists. *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990). The overlap is from 1000 to 2000  $\mu\text{m}$  with respect o Motoi et al.

22. Claims 1, 3-5, 11, and 13-15 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Trout et al (4,963,471). Trout et al disclose laminates of a transparent support, a transparent photopolymerizable layer with an optional conventional intermediate layer to facilitate adhesive properties with a transparent optical adhesive being cited as used for lamination of protective layer. Thus, the elements of Trout et al are required to be transparent because they are going to be used for devices such as heads up displays which must be seen through by the user. The use of a transparent laminate with support and photosensitive layer is not optional but required, the only variant is the optional use of an adhesive. Thus, workers of ordinary skill in the art would immediately envision the use of such

Art Unit: 1752

conventional layers in the laminates of Trout et al or in the alternative, the teachings of Trout et al to use such adhesive agents would have been *prima facie* obvious in view of their use being taught by Trout. In Trout et al, see particularly col. 3, lines 46-53, col. 4, lines 20-61, col. 9, lines 45-65, col. 15-16 and heads up display with special attention to col. 16, lines 29-35, col. 17, lines 44-63, col. 19, lines 25-47.

23. Claims 1-3, 7, 11-13 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hepher et al (4,041,204). The photosensitive sheet product of Hepher et al wherein the photosensitive coating layer is colorless as disclosed in col. 4, lines 21-37 makes obvious the instant laminate and plate wherein while the specific thickness of the photosensitive layer used in the laminate is not given, the examples give coating weights of 35 to 25 grams per square meter. This is held to fall inherently within the range of 1 mm or greater thickness for this layer as is required of the plate of instant claim 7. The choice of a colorless photosensitive layer is the choice of a clear layer. Since white layer is listed as an alternative to colorless in Hepher et al, then colorless would be understood to mean a clear layer, i.e. a layer that would have a total light transmittance in the visible inherently greater than 60%. The keycoat of Hepher et al equivalent to the adhesive layer of the instant laminate. It must be light transmissive enough not to muddy the color of the photosensitive material to be dyed and the base is disclosed to be transparent or translucent. Thus, with respect to instant claims 1-3, 7, 11-13 and 17, the photosensitive sheet product of Hepher et al when chosen to be colorless makes obvious the instant laminate and plate wherein coloration either by dyeing the processed sheet or painting the process sheet as desired before transfer onto a carrier sheet.

Art Unit: 1752

24. Claims 1-5 and 11-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Hosokawa et al (5,565,501). The examiner notes that the laminate of claims 1-5 and 11-15 require the present of an adhesive layer and a photosensitive resin layer and a support and that there be a laminate. There is no requirement that the photosensitive resin layer be separate from the adhesive layer. Thus, the coated substrates of Examples 2-5 of Hosokawa et al wherein the active-energy-ray-composition is photosensitive as well as adhesive by design anticipates the instant laminates of applicant's claims 1, 3-5 and 11, 13-15. The haze value for the materials are given and support a material with less than 60% total light transmission as is required. The examiner notes that if relative position of adhesive layer to photosensitive resin layer were given in these claims then the laminate would require these layers to be separate layers. However, she notes that in col. 1 of Hosokawa et al, reference is made to using primer layers between curable coatings and substrates being known in the art.

25. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

26. Claim 1 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 4 of copending Application No.

Art Unit: 1752

10/319,531. Although the conflicting claims are not identical, they are not patentably distinct from each other because instant applicant's claim is broader and more generic than the Application No. 10/319,531 claim is. Thus, instant applicant's claim is anticipated by claim of the copending application. See particularly See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

27. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Scrutton et al (4,234,673) teach forming an image on the back of a transparent sheet of a laminate with an imaged color layer on the front to finish a sign. In Scrutton et al, see particularly col. 3, lines 5-16. Scrutton et al is drawn to a transferred image material. The image is placed not on the original support for the photosensitive layer but on the receiver support of the imaged material obtained from the photosensitive material. Shepherd et al (GB 2 153 100 A) teach elements with layers that could have been formed from a laminate like that of instant claim 1 but were not. In Shepherd et al, see Example 2.

28. Claims 6 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

*Any inquiry concerning this communication or earlier communications from the examiner should be directed to Primary Examiner Cynthia Hamilton whose telephone number is (703) 308-3626. The examiner can normally be reached on Monday-Friday, 9:30 am to 5:00 pm.*

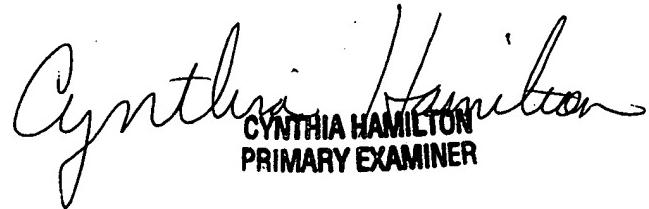
*If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Baxter can be reached on (703) 308-2303. The fax phone numbers for the*

Art Unit: 1752

*organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.*

*Any inquiry of a general nature or relating to the status of this application should be directed to the 1700 receptionist whose telephone number is (703) 308-0661.*

Cynthia Hamilton  
June 15, 2003

  
CYNTHIA HAMILTON  
PRIMARY EXAMINER